



**BIBLIOTEKA
NARODOWA**

New Developments in ILS Software – API's, App's and Mobile

Robert Jacobs
Director of Sales Europe, Innovative

Agenda

- Introduction
- Concepts v's Technologies
- API's, Apps, Mobile
- What next
- Conclusion

400

Employees

66

Countries

9,500

Libraries

120

Librarians

2,400

Systems

400

Employees

66

Countries

9,500

Libraries

120

Librarians

2,400

Systems

Emeryville

Blacksburg

Syracuse

Dublin

Barcelona

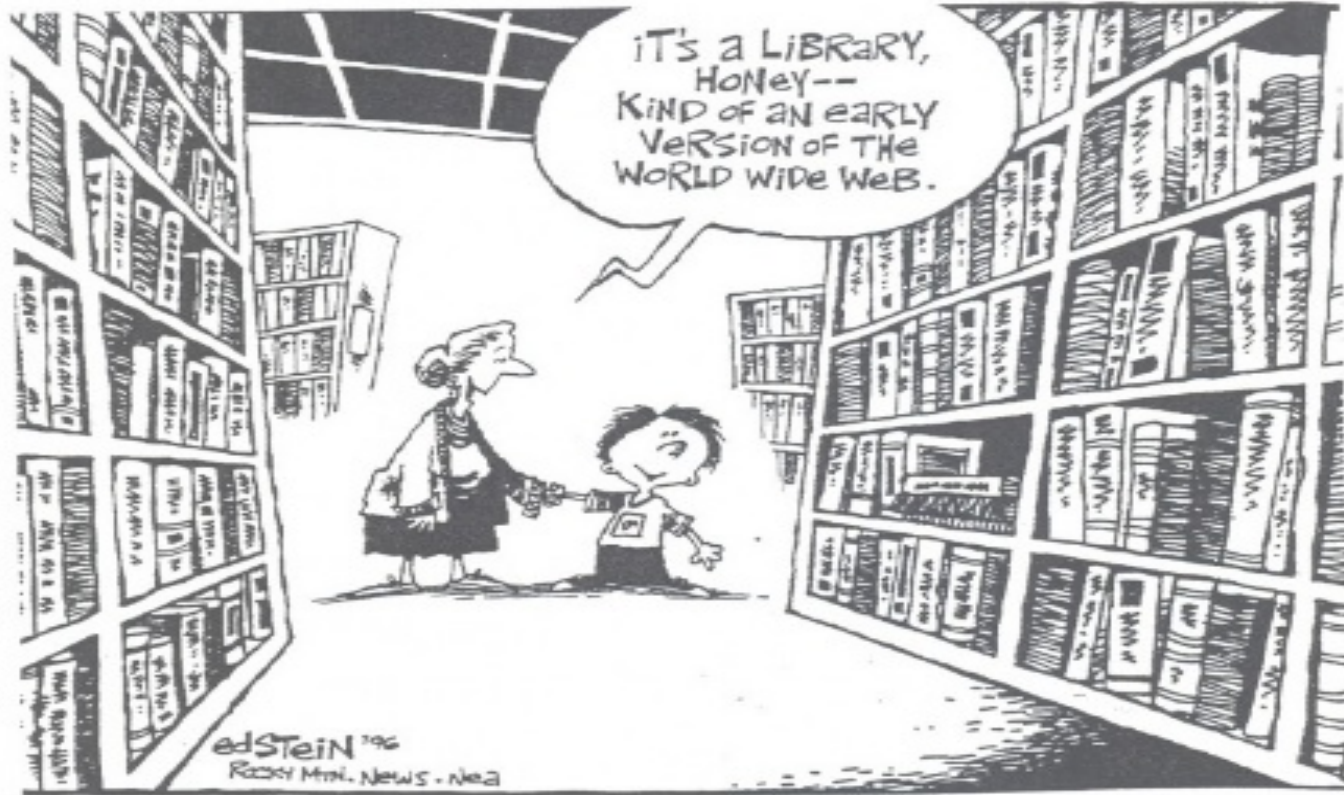
Noida

Kuala Lumpur





Technology

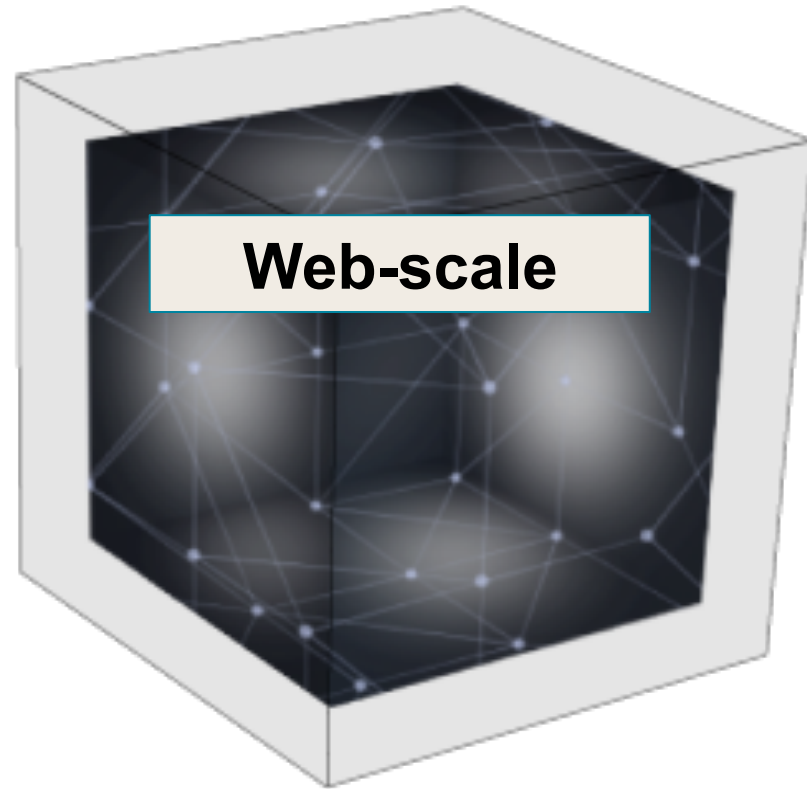
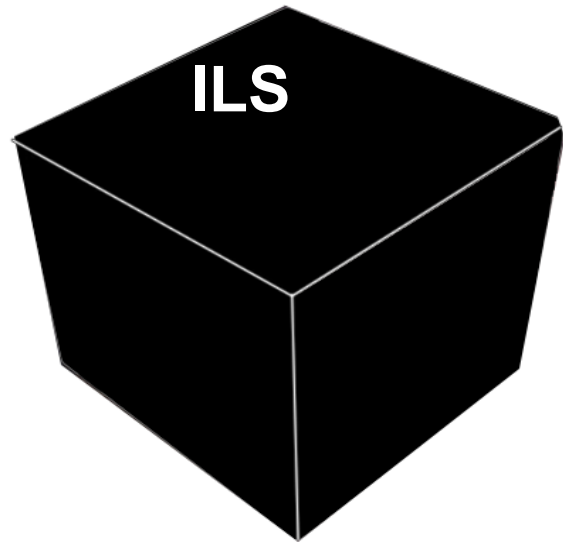


Concepts vs. Technologies

- Don't implement a technology for technology's sake
- Library 2.0 is more about the concepts, not just the emerging technologies
- The concepts are what will endure over time, not necessarily a specific piece of software or online application
- It's the human aspect – the users that are important
- Technology is just a tool for helping people interact with one another

CHALLENGE: Closed "Black Box" Systems

CHALLENGE: CLOSED "BLACK BOX" SYSTEMS



The Pillars



**Transition
to the Cloud**



**Linked
Data**



**User
Experience**



e-Content

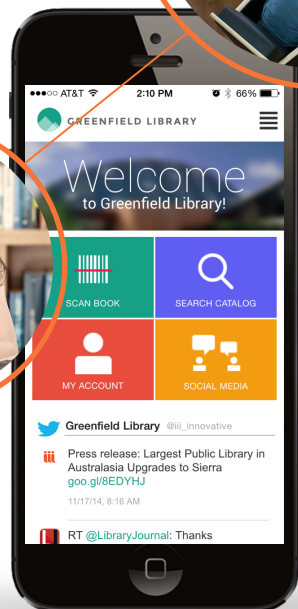
COLLABORATIVE



SUSTAINABLE



PERSONALIZED



OPEN LIBRARY EXPERIENCE

Why “Open” is Important

Reality
Managing
a tight budget



Balance



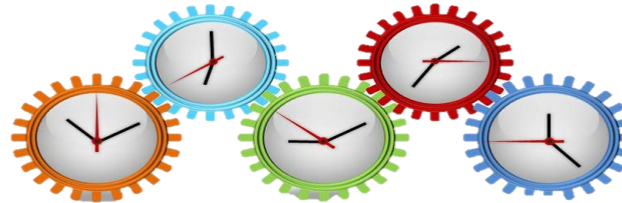
Objective
Solve the “e-Problem”



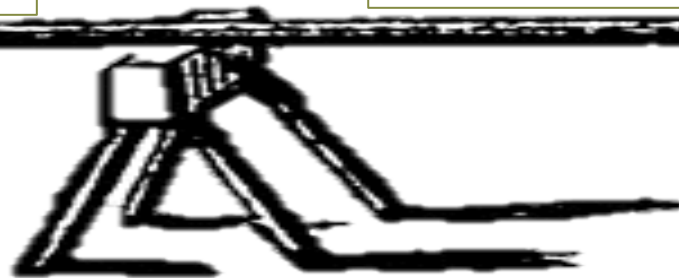
Objective
Seamless access to print and
electronic resources



Objective
Unified, efficient workflows with no
duplicate work



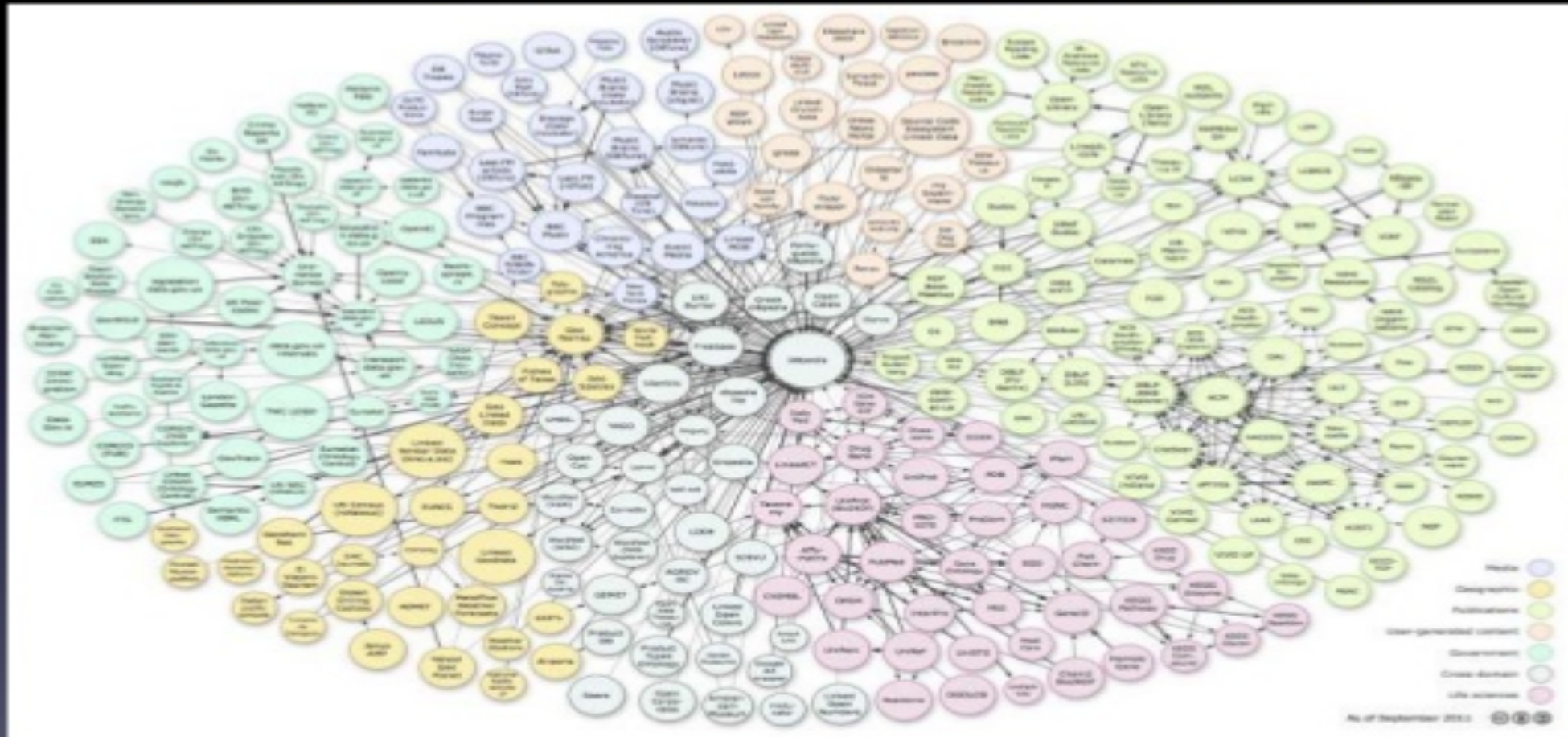
Objective
Cloud-based solution with web &
mobile access





Big Data

“The coolest thing to do to your data will be thought of by someone else.”



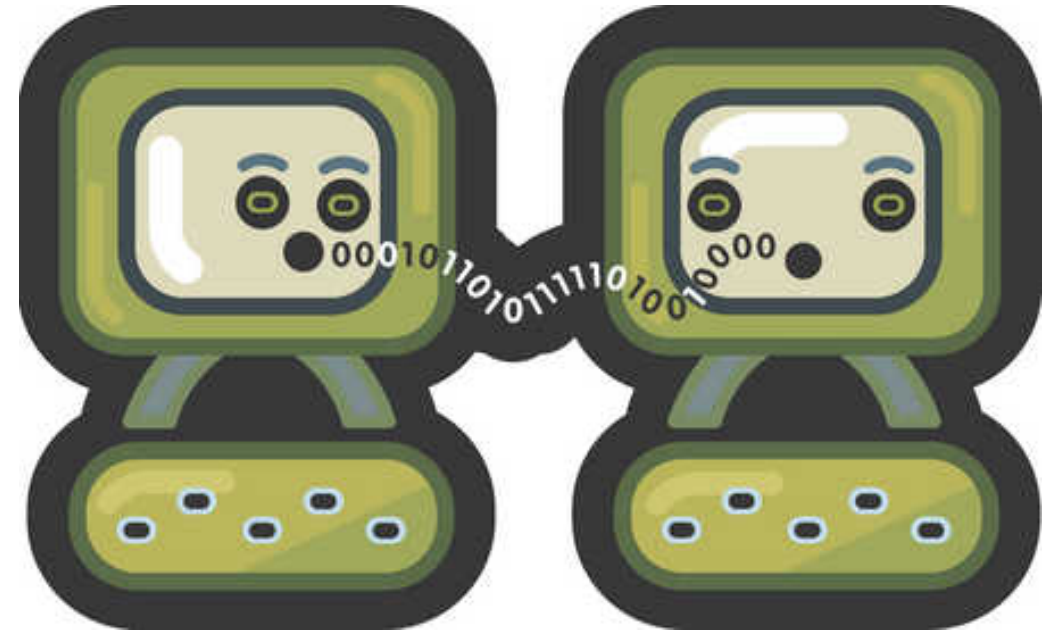


API's

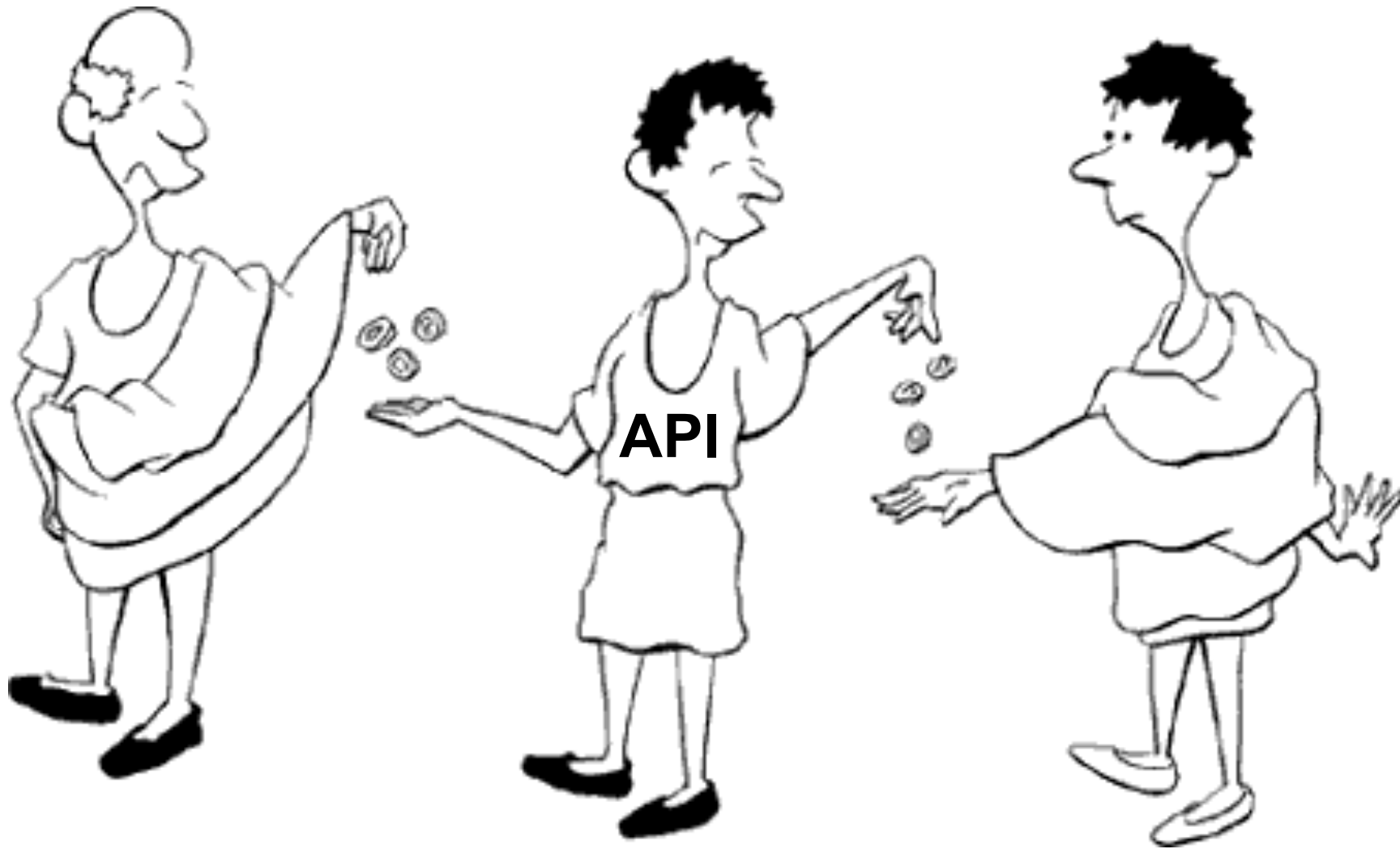
What is an API?

Application Programming Interface

A way to organize interactions and the exchange of data between systems.



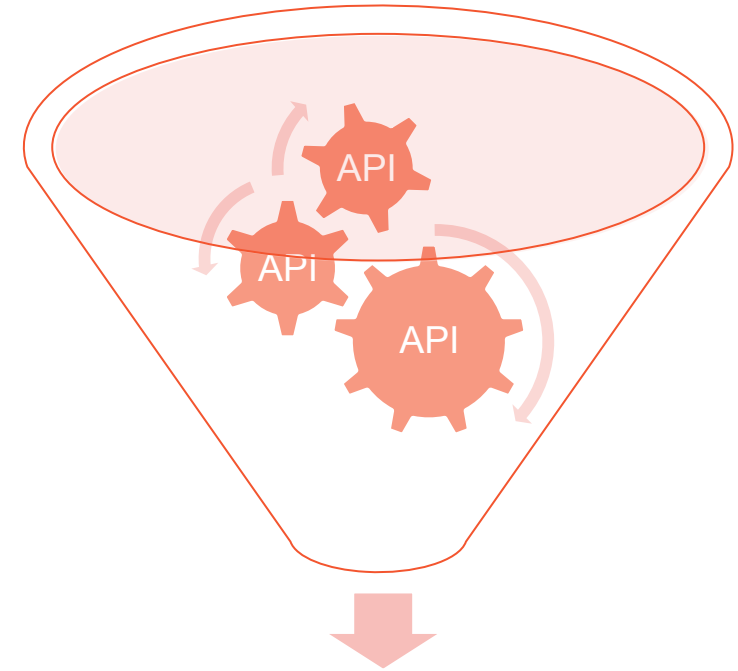
“Middlemen”



API's Perform Actions and Transform Data



“Raw Data”

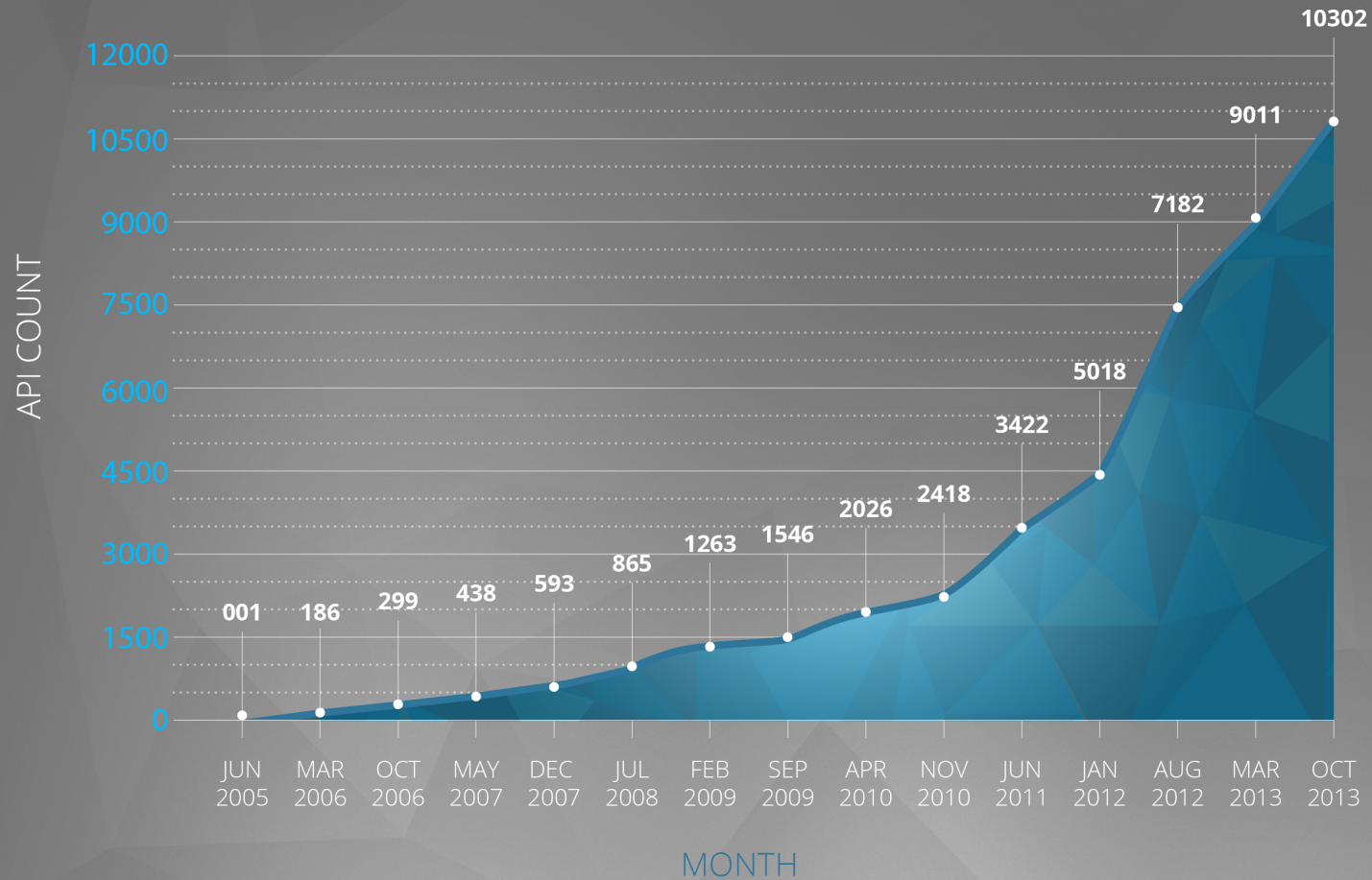


“Useful Data”



ProgrammableWeb

Growth In Web APIs Since 2005





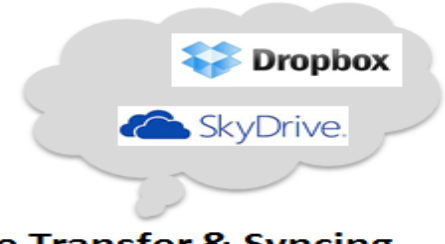
Advertising



Analytics



Contacts



File Transfer & Syncing



Gaming



Health



Location-based Services



Mapping



Messaging



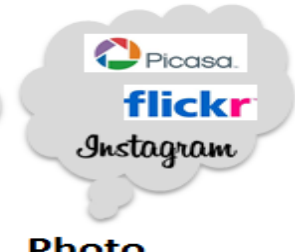
Music



News



Payments



Photo



Search



Shopping



Social



Telephony



Video



Legacy APIs
[(s)FTP, RPC, SOAP, XML, Delimited Files]



RESTful APIs



What are RESTful APIs?

RESTful APIs

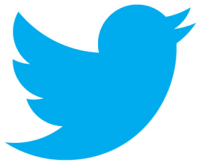
- **R**epresentational **S**tate **T**ransfer
- Roy Fielding described **R**epresentational **S**tate **T**ransfer in his doctoral dissertation as a key architectural style for the World Wide Web

RESTful APIs

- Based on URI structure
 - `https://api.twitter.com/1.1/statuses/user_timeline.json?screen_name=iagdotme`
 - `<Where to find resource><Resource Name>?parameter=xyz`
- Simple
- Uses HTTP for communicating between client and server
- Uses HTTP verbs and parameters to decide what to do
- Uses JSON or XML as its data format

HTTP Verbs

- GET – Read a resource
- POST – Write a resource
- PUT – Modify a resource
- DELETE – Delete a resource
- ... and a few others but these are the most commonly used verbs



Twitter Example

- Returns a collection of the most recent Tweets posted by the user indicated by the `screen_name` or `user_id` parameters.
- GET `statuses/user_timeline`
- https://api.twitter.com/1.1/statuses/user_timeline.json?screen_name=iagdotme

<Where to find resource><Resource Name>?parameter=xyz

Today's Sierra REST APIs

- Bib API

bibs : The Bib API

[Show/Hide](#) | [List Operations](#) | [Expand Operations](#) | [Raw](#)

GET	/v2/bibs/	Get a list of bibs
GET	/v2/bibs/{id}	Get a bib by record ID
GET	/v2/bibs/{id}/marc	Get the MARC data for a single bib record

- Item API

items : The Item API

[Show/Hide](#) | [List Operations](#) | [Expand Operations](#) | [Raw](#)

GET	/v2/items/	Get a list of items
GET	/v2/items/{id}	Get an item by record ID

NEW Sierra REST APIs

- Patron API
- Branch API
- Authority API
- Bib API
- Item API

Patron API

GET	/v2/patrons/	Get a list of patrons
GET	/v2/patrons/checkouts/{checkoutId}	Get the checkout for a specified patron ID and checkout ID
GET	/v2/patrons/fines/{fineId}	Get the fine record for a specified patron ID and fine ID
GET	/v2/patrons/holds/{holdId}	Get the hold record for a specified patron ID and hold ID
PUT	/v2/patrons/holds/{holdId}	Modify a hold
DELETE	/v2/patrons/holds/{holdId}	Delete hold by hold ID
GET	/v2/patrons/{id}	Get a patron by record ID
PUT	/v2/patrons/{id}	Update the Patron record
GET	/v2/patrons/{id}/checkouts	Get checkout data for a single patron record
GET	/v2/patrons/{id}/fines	Get the fines data for a single patron record
GET	/v2/patrons/{id}/holds	Get the holds data for a single patron record
DELETE	/v2/patrons/{id}/holds	Cancel all holds for the specified patron
POST	/v2/patrons/{id}/holds/requests	Place a new hold request

Branches & Authority APIs

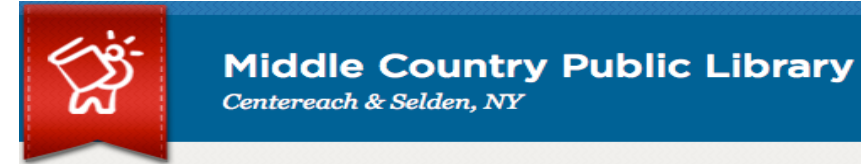
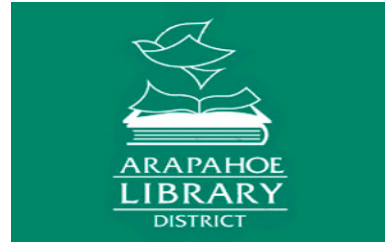
- Branches API

GET	<code>/v2/branches/</code>	Get a list of branches
GET	<code>/v2/branches/{id}</code>	Get a branch by record ID

- Authorities API

GET	<code>/v2/authorities/</code>	Get a list of authority data
GET	<code>/v2/authorities/{id}</code>	Get an authority record by record ID
GET	<code>/v2/authorities/{id}/marc</code>	Get the MARC data for a single authority record

Early Adopters



BIBLIOTEKA
NARODOWA





Mobile and App's

Chapter One

A royal-red Ford F-150 Super-Crew rolled through the streets of Albany, Georgia. The pickup's driver brimmed with optimism, so much that he couldn't possibly foresee the battles about to hit his hometown.

Life here is going to be good, thirty-seven-year-old Nathan Hayes told himself. After eight years in Atlanta, Nathan had come home to Albany, three hours south, with his wife and three children. New start. Even a new house. New start. Even a new truck. Sleeves rolled up and rolled down, Nathan pulled into a service station in south Georgia, a remodeled west Albany, a very one he'd version of the very one he'd stopped at twenty years earlier. He'd been nervous. Wasn't his part of town—mostly white folks, and in those days many. But g and the drive

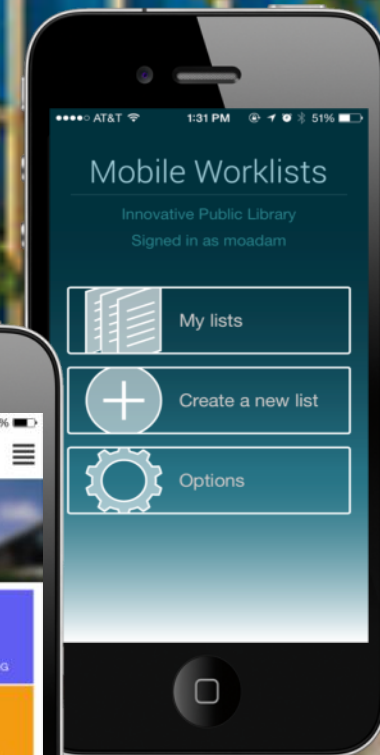
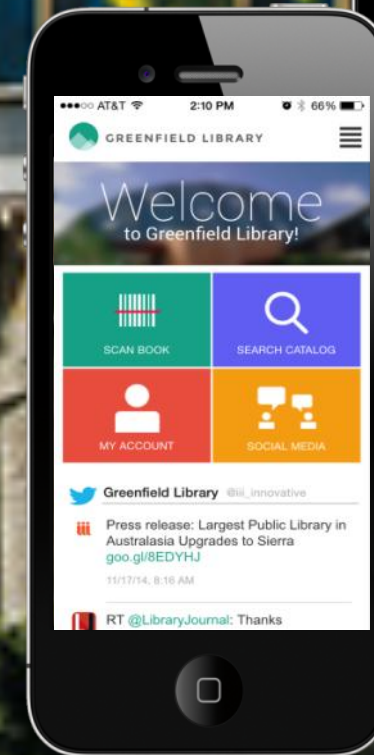
LEAP Utilities Help Keyboard Eskandar (SK235)

NEW PATRON

MR. JEFFERY D FRANKLIN
STILLWATER PUBLIC LIBRARY

Profile

Barcode *	Registered At *	
<input type="text" value="2175600332022"/>	<input type="text" value="Stillwater"/>	
Former Barcode	Patron Code *	
<input type="text"/>	<input type="text" value="Regular"/>	
Last Name *	Date of Registration	
<input type="text" value="Franklin"/>	<input type="text" value="4/7/2006"/>	
First Name *	Expiration Date *	
<input type="text" value="Jeffery"/>	<input type="text" value="12/31/2013"/>	
Middle Name	Birth Date	
<input type="text" value="D"/>	<input type="text" value="10/2/1979"/>	
Title	Suffix	Gender
<input type="text" value="Mr."/>	<input type="text"/>	<input type="radio"/> Male <input type="radio"/> Female <input type="radio"/> N/A
ID Number	Statistical Class	
<input type="text"/>	<input type="text" value="Columbia County"/>	





iTunes is the world's easiest way to organize and add to your digital media collection.

We are unable to find iTunes on your computer. To download the free app Mobile Worklists by Innovative Interfaces, Inc., get iTunes now.

Already have iTunes? Click I Have iTunes to open it now.

I Have iTunes



iTunes 11
For Mac + PC

Free Download

Mobile Worklists

[View More by This Developer](#)

By Innovative Interfaces, Inc.

Open iTunes to buy and download apps.



Description

Bring Sierra into the stacks! Mobile Worklists provides real-time access to material handling tasks in Sierra, all from your handheld device. With the click of a button, access Sierra while away from your desk. Watch your productivity increase as your reliance on outdated paper processes and trips to the desk decrease.

[Innovative Interfaces, Inc. Web Site](#) [Mobile Worklists Support](#)

[...More](#)

View in iTunes

This app is designed for both iPhone and iPad

Free

Category: [Productivity](#)

Released: Mar 31, 2015

Version: 1.0

Size: 6.0 MB

Language: English

Seller: Innovative Interfaces, Inc.

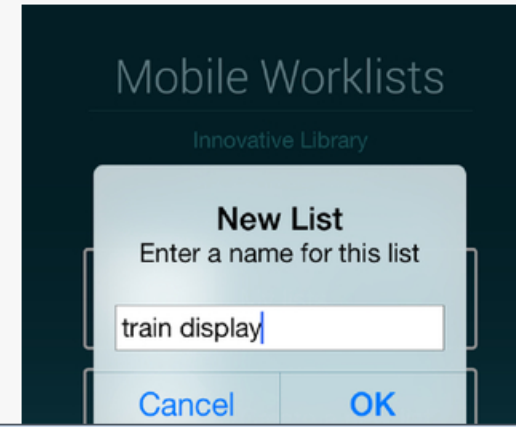
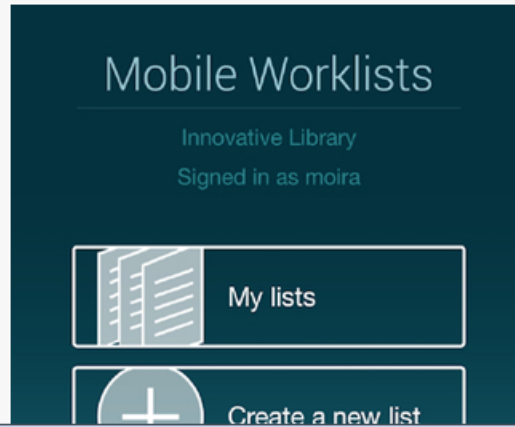
© Copyright 2015 Innovative

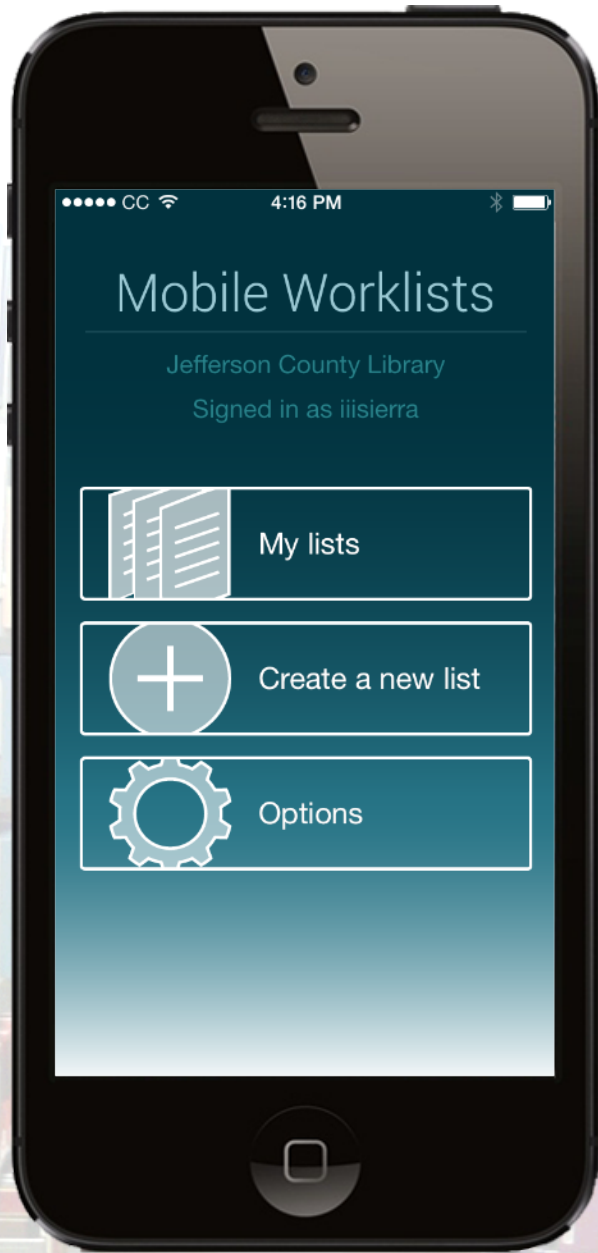
Interfaces Inc., All Rights

Reserved

Screenshots

iPhone | iPad





Mobile Worklists

Jefferson County Library
Signed in as iisierra



My lists

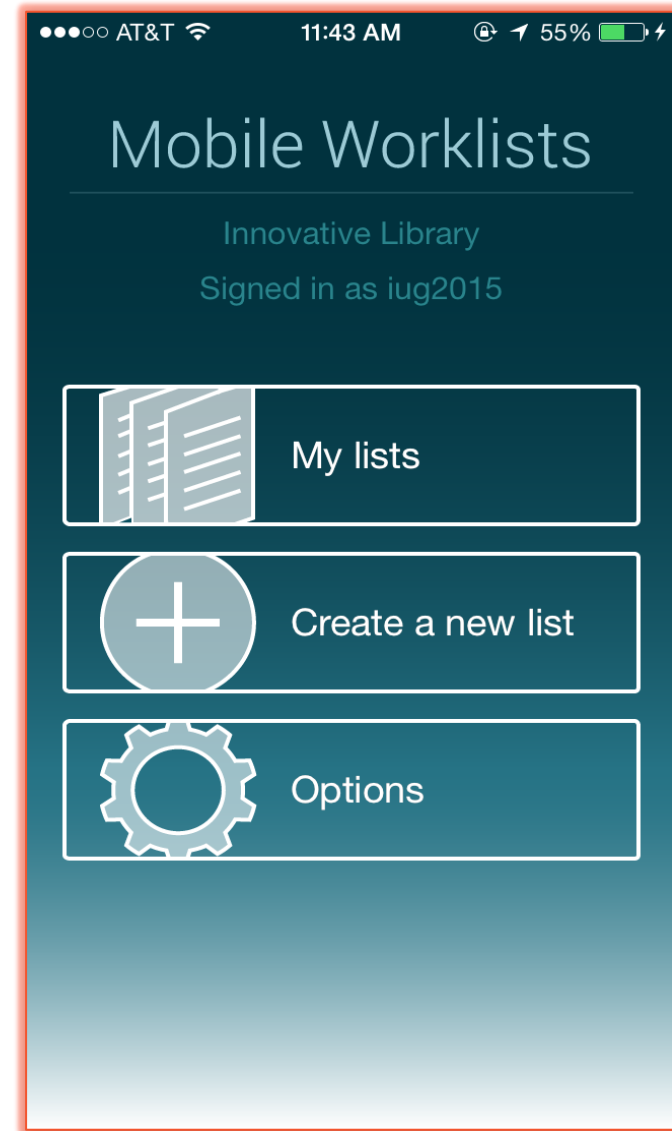
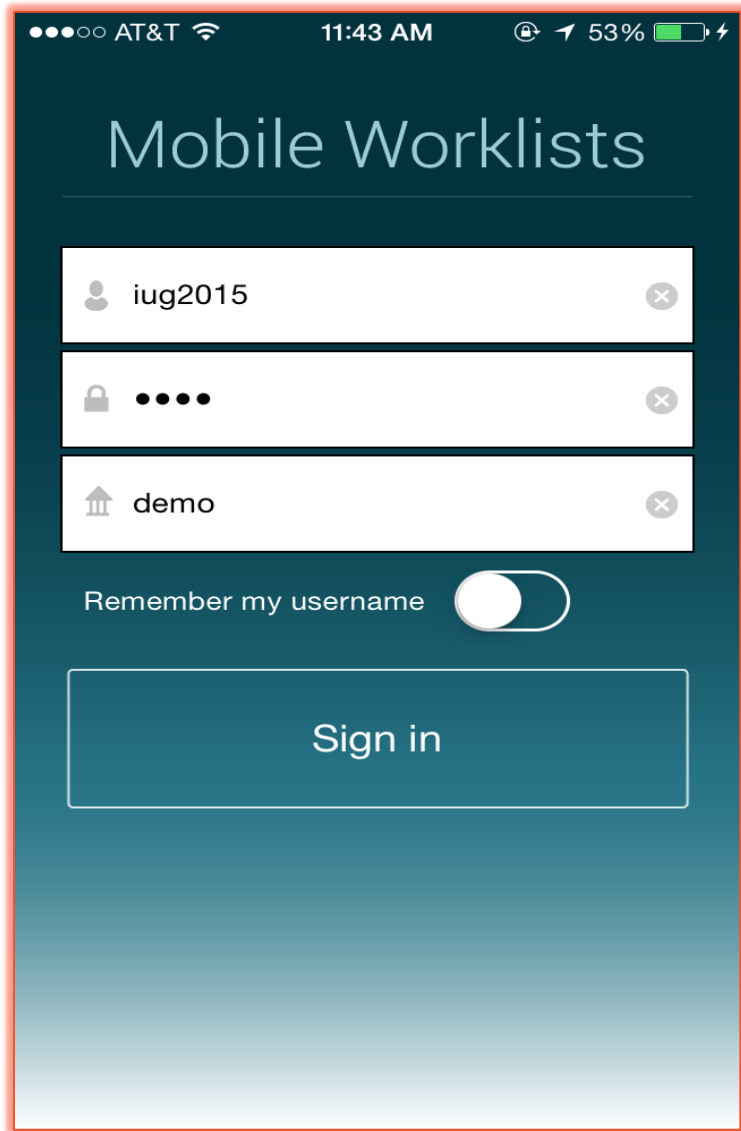


Create a new list



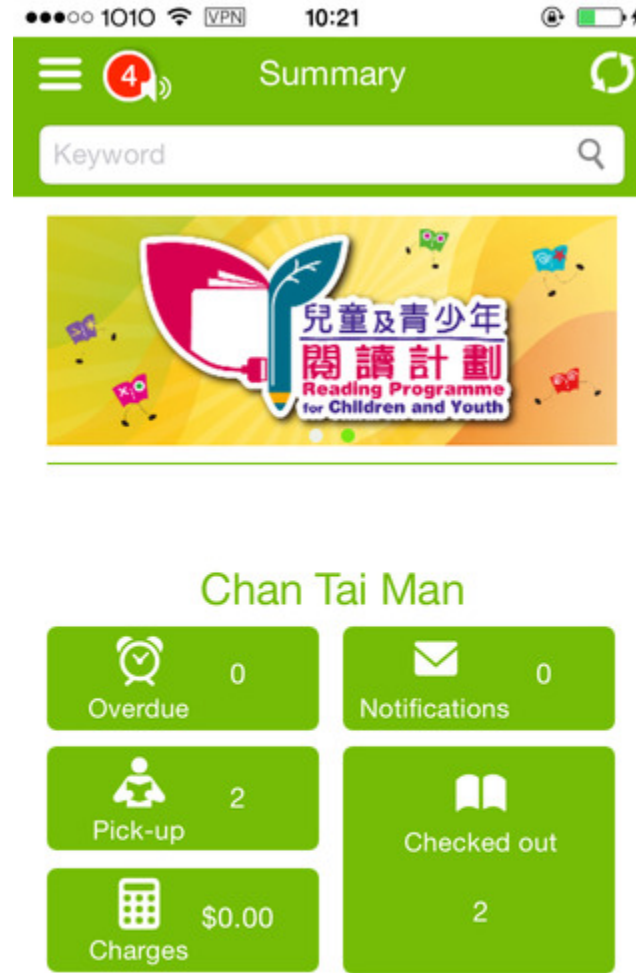
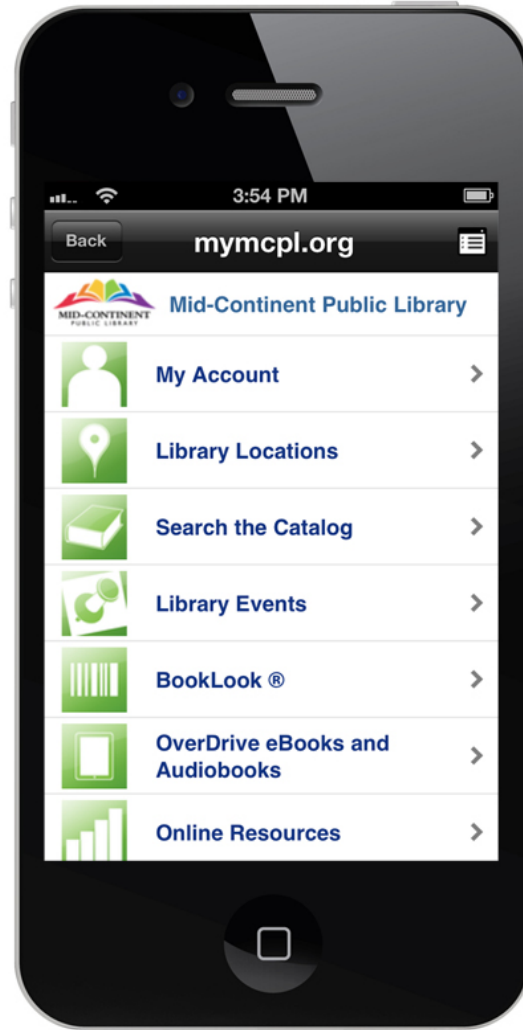
Options

Mobile Worklists





Apps



Last updated on : 2014-08-29 10:01

Landing Screen Tour



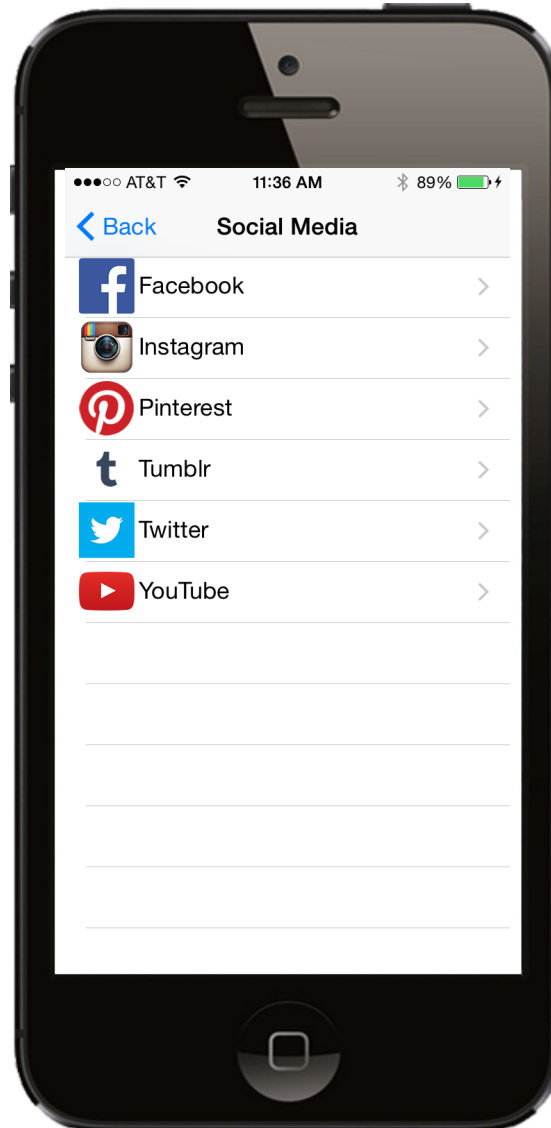
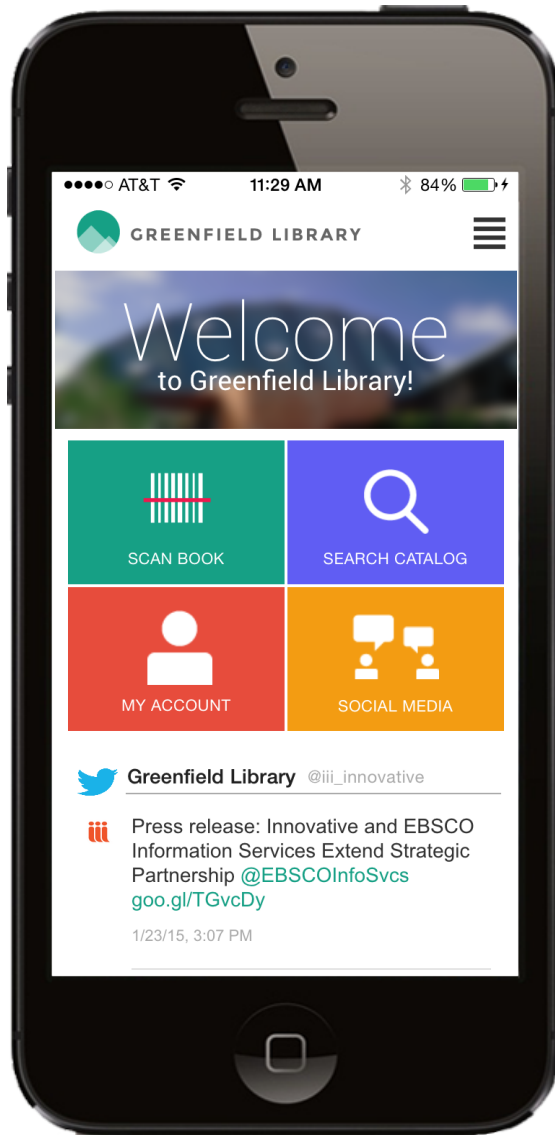
Hamburger submenu

Branding – library's logo

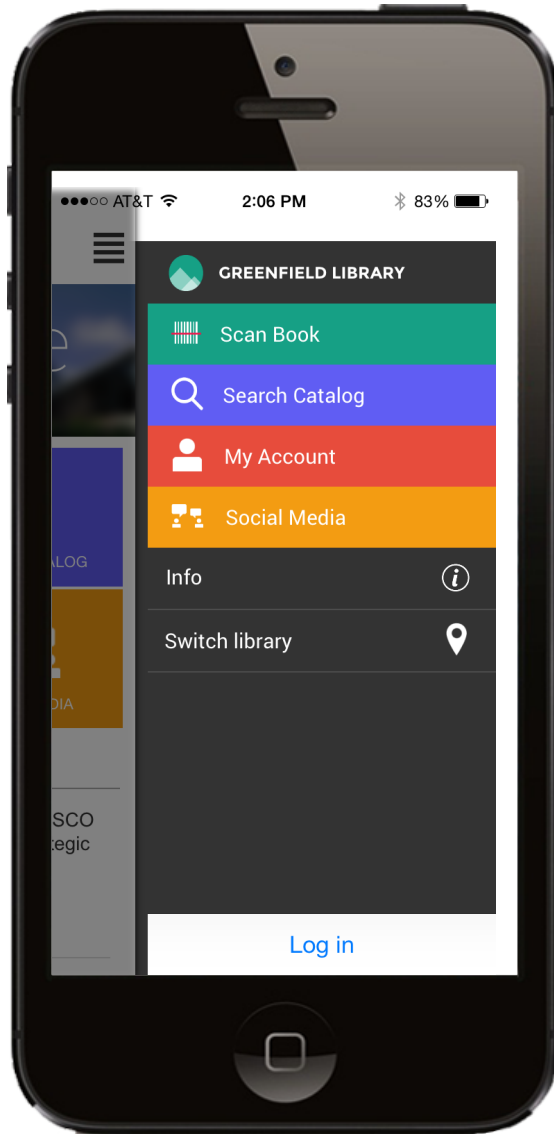
Version 1 Features

Library's Twitter Feed

WebView of Social Media & Search Catalog

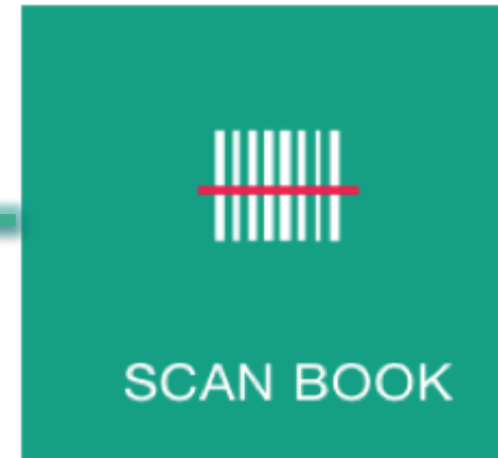
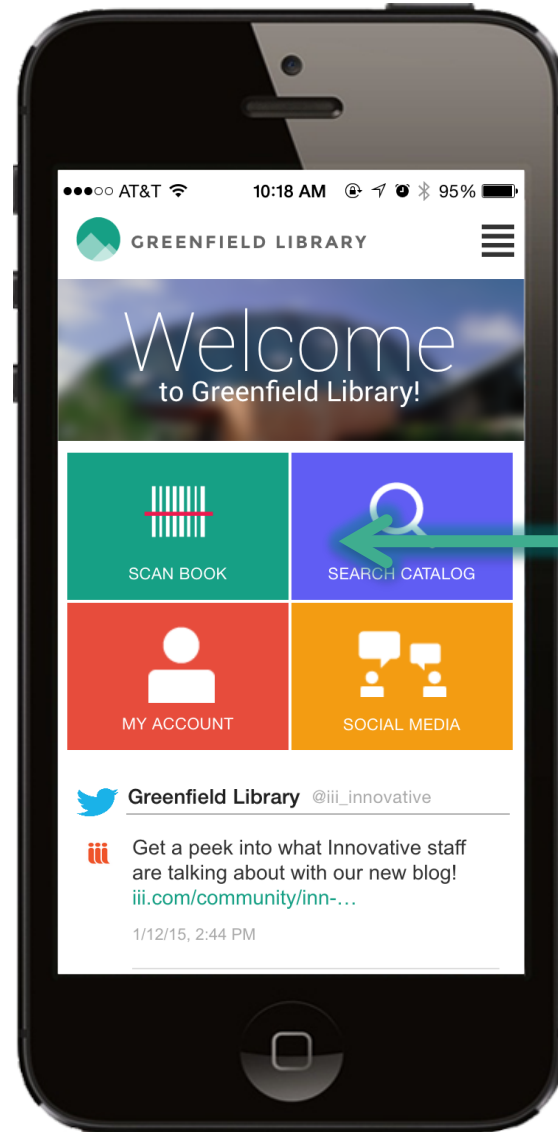


Submenu

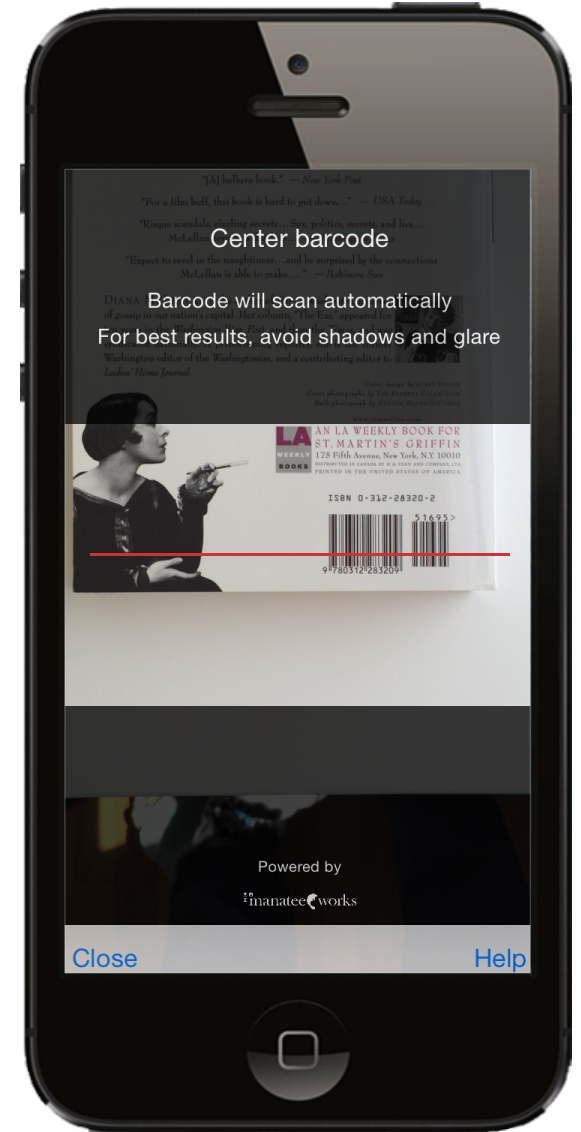
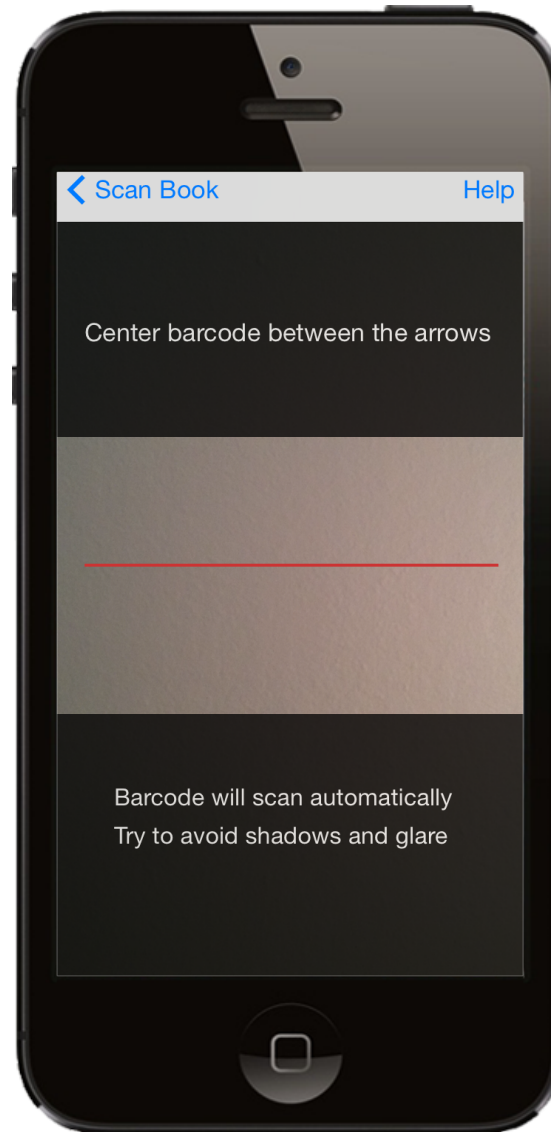
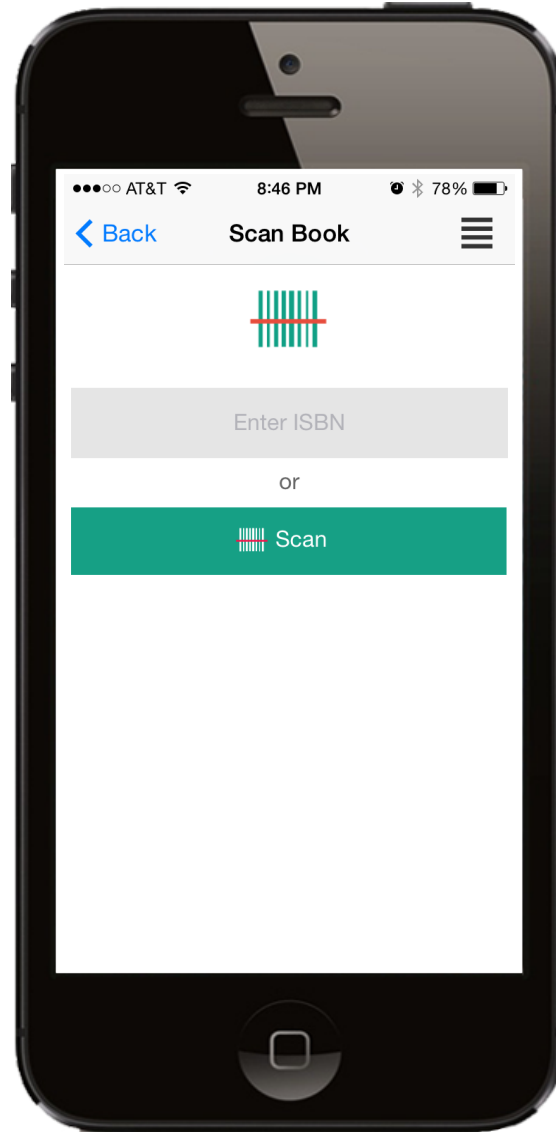


- The submenu will house :
 - Navigation to features
 - Log out option
 - ‘Choose a Library’ option

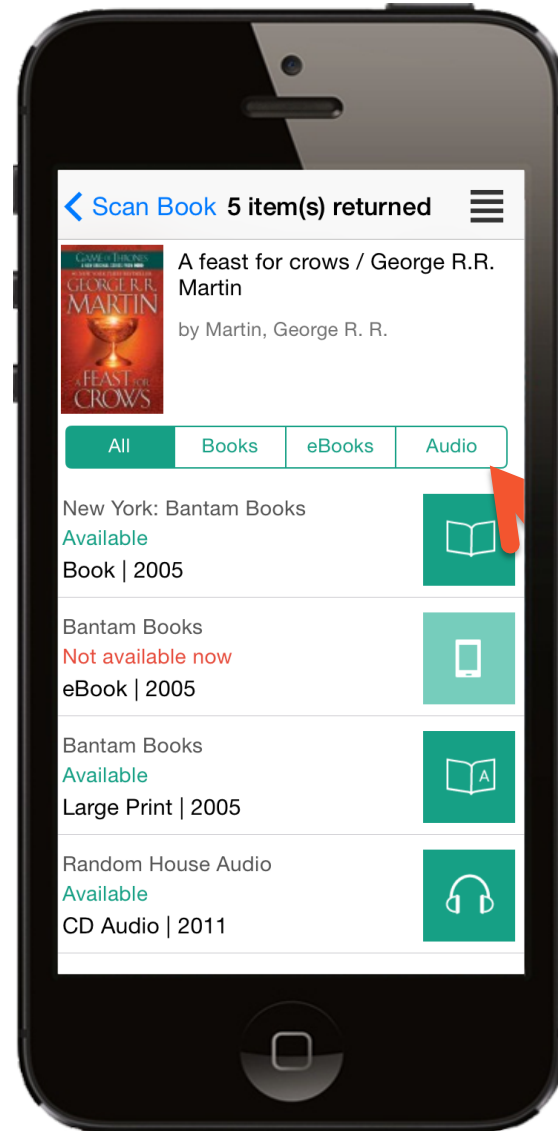
Step 1 – Choose *Scan Book*



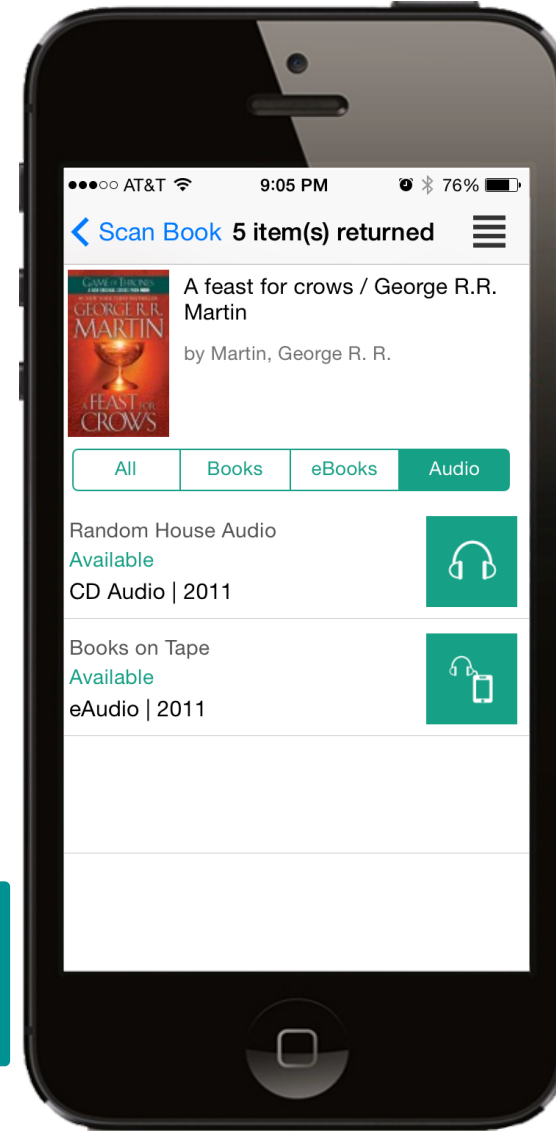
Step 2 – Scan Barcode or Enter ISBN



Step 3 – Retrieved Results/Filter

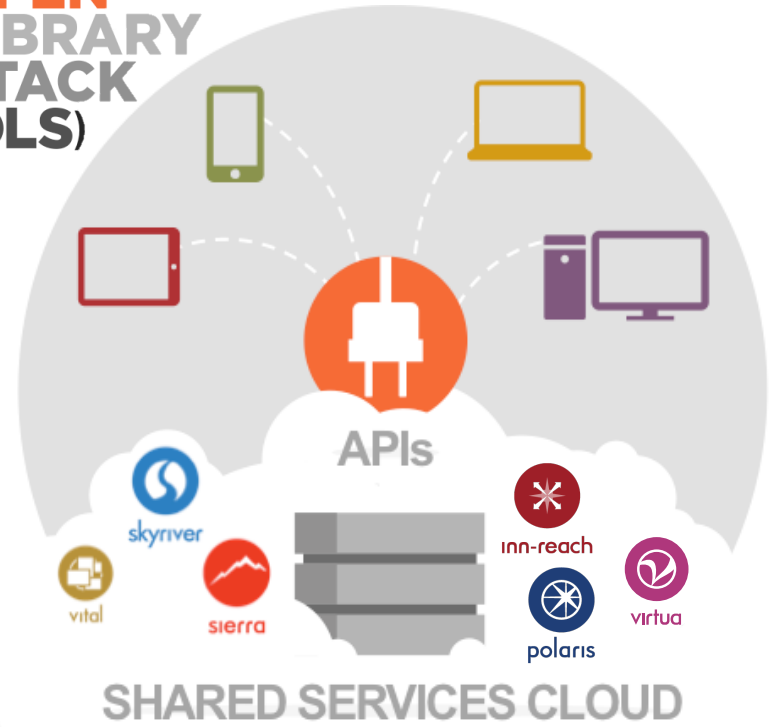


Select 'Audio'





**OPEN
LIBRARY
STACK
(OLS)**



PERSONALIZED



SUSTAINABLE



COLLABORATIVE



What next?

LINKED DATA

Linked Data – What it is and why we care.

Linked Data has reached a tipping point

It is what RDA was 3 years ago – a general topic of conversation, an open discussion



Linked Data in Libraries: A new paradigm

- Use of the Semantic Web (Web 3.0) to put library gathered and curated material in a form that the rest of the web can understand and act upon
- Use of semantic search to follow links and find connections
- A richer Linking mechanism for the Web that takes us from Hypertext Links (Document to Document) to Hyperdata Links (across things that documents are about)

What is the value proposition for libraries?

- First, inside out
 - Patron is in the library catalogue and can find resources that are extensions of what they have already found or looked for – without staff having to have pre-identified what those resources might be
- Second, outside in
 - Patron is on the web and searching for something that the local library owns or has access to, without the patron necessarily being aware of the library as a resource

Innovative and the Libhub Initiative

- Innovative is a sponsor of the Libhub Initiative
- Focus on the visibility of library resources on the Web
- Developing and deploying enabling technologies
 - Link data
 - Shared vocabularies
 - BIBFRAME
 - Schema.org

How does it work with BIBFRAME?

- BIBFRAME is the successor for MARC
- BIBFRAME provides the syntax for Linked Data to find the relationships
- It moves away from a dependence on matching text strings and into machine recognizable RDF “triples”

CIVIL WAR ON THE WESTERN BORDER



THE MISSOURI-KANSAS CONFLICT 1854-1865

- HOME
- MAPS
- TIMELINE
- ESSAYS
- GALLERY
- LESSON PLANS
- PARTNERS
- ABOUT

Topics
A-Z List

Search...



Discover the Civil War's legacy in the Greater Kansas City region.

- ▶ Recipient of three major historical awards
- ▶ Featuring a Foreword on the Civil War in Kansas City by Rick Montgomery

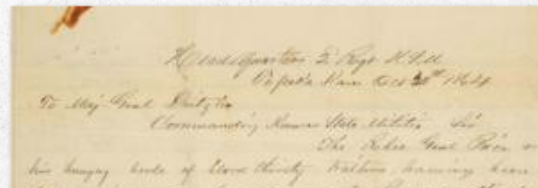


THIS MONTH IN 1864

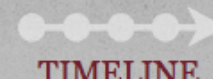
October 1864

A post by **Jason Roe**, Kansas City Public Library

General Sterling Price's Army of Missouri advances on Kansas City, is dealt a crippling blow at the Battle of Westport near the present-day Country Club Plaza, and faces possible annihilation at Mine Creek and Newtonia.



Learn about key regional Civil War sites

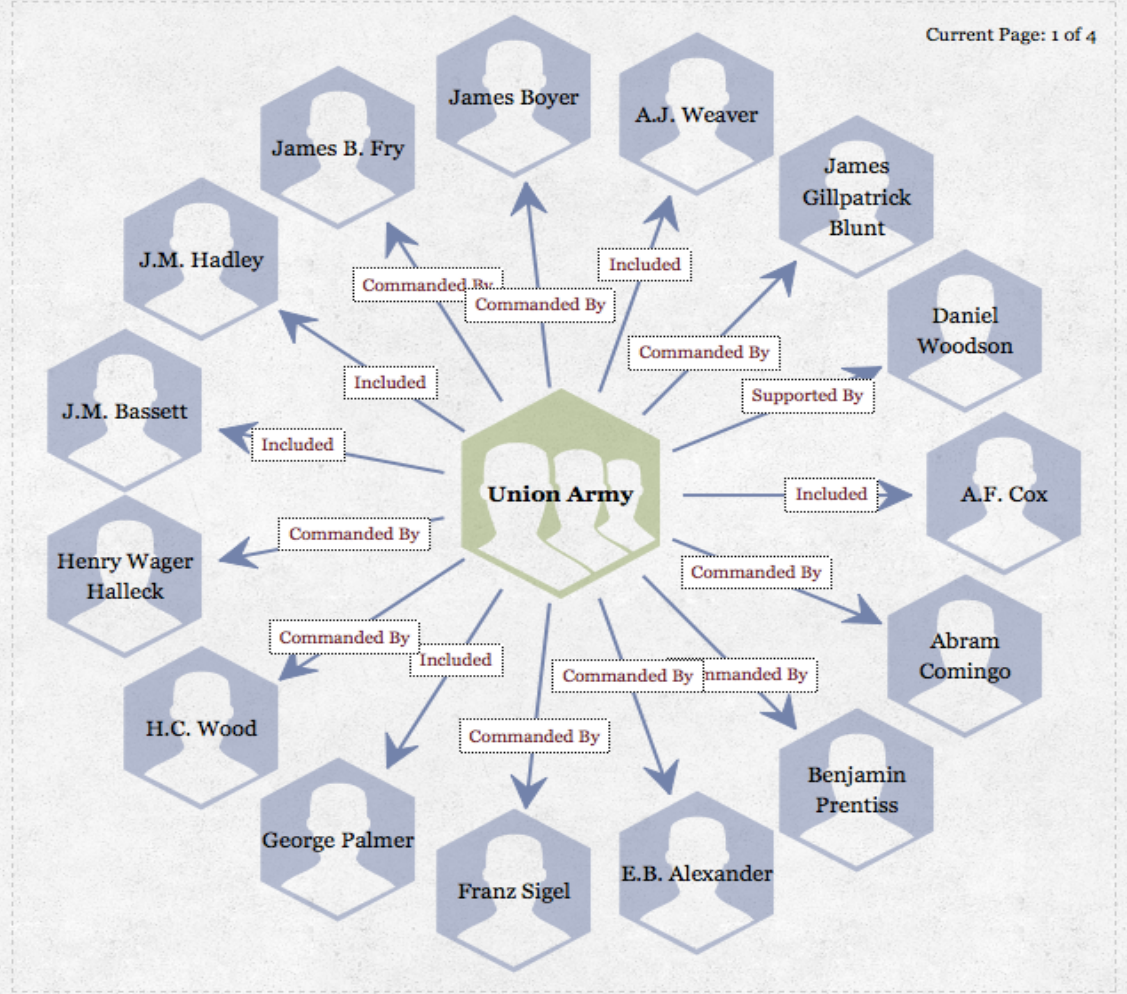


TIMELINE

← Back Forward →

Union Army 46 relationships

Current Page: 1 of 4



Freedom's Frontier Nat
Mid-Continent Public Li

This project is supported
Library, a

Missouri, Kansas City |
Missouri Research Center-

red by the Missouri State
k, Trustee



Conclusion

Future of Library systems

- The future is already here, some libraries are already implementing these
- Data needs to be set free
- Libraries need to develop services, engaging with enabling technologies
- The Library system needs to become an engine for connectivity
- Libraries will increasingly become differentiated on the services they can tailor to their users

Thank you

Robert Jacobs
rjacobs@iii.com